

No.

9900285



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

D&H Technology Holding Company, LLC.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

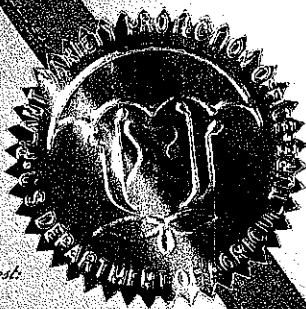
AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT, (84 U.S.C. 2622, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'DP 5915 RR'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-seventh day of August, in the year two thousand and four.



Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

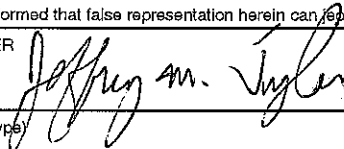
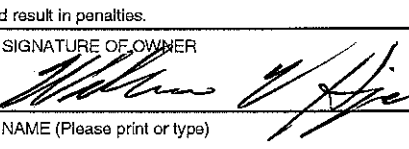
U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER D&PL Technology Holding Company, LLC.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME DPX 5915 RR		3. VARIETY NAME DP 5915 RR	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) PO Box 157 100 Main Street Scott, Mississippi 38772 USA		5. TELEPHONE (include area code) (662) 742-4141		PVPO NUMBER 9900285	
		6. FAX (include area code) (662) 742-3182		FILING DATE 5 May, 1999	
7. IF THE OWNER IS NOT A "PERSON" GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Limited Liability Company		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware		9. DATE OF INCORPORATION February 29, 1996	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Delta and Pine Land Company Kelly Casavechia P.O. Box 157 Scott, MS 38772				FILING AND EXAMINATION FEE: \$ 2,450.00 DATE 5 May, 1999 CERTIFICATION FEE: \$ 432.00 DATE 7-16-04	
11. TELEPHONE (include area code) (662) 742-4141		12. FAX (include area code) (662) 742-3182		13. E_MAIL kelly.h.casavechia@deltaandpine.com	
				14. CROP KIND (Common Name) Soybean	
15. GENUS AND SPECIES NAME OF CROP Glycine Max		16. FAMILY NAME (Botanical) LEGUMINOSAE		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse). a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)			19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no", go to item 22)		
			20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		
			21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCE FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO - As of date of original application - 5/18/99 IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)			23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNEE REFERENCE NUMBER. (Please use space indicated on reverse.)		
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF OWNER 			SIGNATURE OF OWNER 		
NAME (Please print or type) Jeffrey M. Tyler			NAME (Please print or type) William V. Hugie		
CAPACITY OR TITLE Soybean Breeder		DATE 02-04-2004		CAPACITY OR TITLE Vice President/Director of Research	
				DATE 02-05-04	

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (*See Section 97.6 of the Regulations and Rules of Practice*). Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieites, lines, or clones used, and the breeding method
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) Identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See Regulations and Rules of Practice, Section 97.103*).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

ROUNDUP READY[®] cotton ~~cotton~~ soybean (per applicant's authorization given 2/10/2004 BT).

These seeds are covered under U.S. Patents 5,633,435; 5,352,605; 5,530,196; 5,188,642; 4,940,835; 5,717,084; 5,728,925; and 5,804,425.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.*)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705.

Telephone: (301) 504-8089. <http://www.ams.usda.gov/seed/ls-sd.htm>

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T -470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

EXHIBIT A

~~DPL Technology Holding Company, LLC's~~ (BT: 2/16/2004)
~~DELTA PINE SEED~~ APPLICATION FOR DP 5915 RR

ORIGIN AND BREEDING HISTORY

SPRING-SUMMER	1992	Original cross and first backcross made between an experimental breeding line DPX 2384 and Roundup tolerant experimental line 40-2-3
FALL	1992	DP 415 crossed with Roundup resistant F ₁ plants from 2384 BC ₁ F ₁
WINTER	1993	P9592 crossed to Roundup resistant F ₁ plants from DP 415 x 2384 BC ₁ F ₁
SUMMER	1993	Cross 93408 made: A5979 crossed to Roundup resistant F ₁ plants from [P9592 x (DP 415 x 2384 BC ₁ F ₁)]
WINTER	1993-94	Roundup tolerant F ₁ plants advanced to F ₂ under lights from cross 93408 under lights in Costa Rica and F ₂ seed was bulked
SUMMER	1994	Roundup resistant F ₂ advanced to F ₃ by modified single seed descent method in Costa Rica
FALL	1994	Roundup resistant F ₃ plants space planted. Individual plant selections harvested and threshed separately
WINTER	1994-95	F ₄ Roundup resistant plant rows from cross 93408 were grown in 3 meter rows in Costa Rica. Row 93408-803 was selected, composited and determined to be stable and breeding true ^{uniform (BT: 2/16/2004) per applicant's authorization} for characteristics described in 'Exhibit C' of this application. No variants were known or observed by the breeder at this time and hence to the present (4 years)
SUMMER	1995	Yield tested at Scott, Mississippi
	1996	93408-803 yield tested in 7 Deltapine Seed tests. Breeder seed purification was initiated.
	1997	93408-803 yield tested at 16 locations. Breeder seed increased to 4 units.
	1998	93408-803 tested at 14 locations. Breeder seed increased to 200 units of Foundation seed. 93408-803 designated as DPX 5915 RR.
	1999	DPX 5915 RR entered into State Agricultural Experiment Station tests. Seed increased to 4000 units.
	2000	Released as DP 5915 RR

EXHIBIT B

~~D&PL Technology Holding~~
~~Company, LLC's~~ (GT: 2/16/2004)
APPLICATION FOR:

DP 5915 RR

NOVELTY STATEMENT

To our knowledge, DP 5915 RR is most similar to Novartis Brand S 59-V6. Differences include but are not restricted to the following:

1. DP 5915RR has white flowers whereas S 59-V6 has purple flowers.
2. DP 5915 RR matures 3 days later than S 59-V6.

OBJECTIVE DESCRIPTION OF VARIETY

SOYBEAN (*Glycine max* L.)

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Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,

0	9
---	---

).

2 = Spherical Flattened (L/W ratio > 1.2 ; L/T ratio = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2 ; T/W > 1.2)

5 = Other (Specify)

2 = Shiny ('Nebsoy'; 'Gasoy 17')

Grams per 100 seeds

7 = Other (Specify)

2 = Green

2 = High

2 = Type B (SP1^b)

4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

4 = Other (Specify)

11. LEAFLET SIZE:

☒ 21 = Small ('Amsoy 71'; 'A5312')
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

12. LEAF COLOR:

☒ 31 = Light Green ('Weber'; 'York')
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

13. FLOWER COLOR:

☒ 1

1 = White

2 = Purple

3 = White with purple throat

14. POD COLOR:

☒ 1

1 = Tan

2 = Brown

3 = Black

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15. PLANT PUBESCENCE COLOR:

☒ 2

1 = Gray

2 = Brown (Tawny)

99 MAY -5 P3:37

16. PLANT TYPES:

☒ 21 = Slender ('Essex'; 'Amsoy 71')
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

17. PLANT HABIT:

☒ 11 = Determinate ('Gnome'; 'Braxton')
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

2 = Semi-Determinate ('Will')

18. MATURITY GROUP:

☒ 0 ☒ 81 = 000
9 = VI2 = 00
10 = VII3 = 0
11 = VIII4 = I
12 = IX5 = II
13 = X

6 = III

7 = IV

8 = V

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

☒ 2Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)☒ 0Bacterial Blight (*Pseudomonas glycinea*)☒ 2Wildfire (*Pseudomonas tabaci*)

FUNGAL DISEASES:

☒ 0Brown Spot (*Septoria glycines*)Frogeye Leaf Spot (*Cercospora sojina*)☐

Race 1

☐

Race 2

☐

Race 3

☐

Race 4

☐

Race 5

☒ 2

Other (Specify)

Races Unknown

☒ 2Target Spot (*Corynespora cassiicola*)☒ 0Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)☒ 0Powdery Mildew (*Microsphaera diffusa*)☒ 0Brown Stem Rot (*Cephalosporium gregatum*)☒ 2Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

CBT: 2/10/2004 per applicant's request
 FORM LMGS-470-57 (2-82) to match amended Exh D submitted
 thereby.

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

9900285

FUNGAL DISEASES: (Continued)

- ☐ Pod and Stem Blight (*Diaporthe phaseolorum* var. *sojae*)
- ☐ Purple Seed Stain (*Cercospora kikuchii*)
- ☐ Rhizoctonia Root Rot (*Rhizoctonia solani*)
- Phytophthora Rot (*Phytophthora megasperma* var. *sojae*)
- ☒ Race 1 ☐ Race 2 ☐ Race 3 ☐ Race 4 ☐ Race 5 ☐ Race 6 ☐ Race 7
- ☐ Race 8 ☐ Race 9 ☐ Other (Specify) _____

VIRAL DISEASES:

- ☐ Bud Blight (Tobacco Ringspot Virus)
- ☐ Yellow Mosaic (Bean Yellow Mosaic Virus)
- ☐ Cowpea Mosaic (Cowpea Chlorotic Virus)
- ☐ Pod Mottle (Bean Pod Mottle Virus)
- ☒ Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

- Soybean Cyst Nematode (*Heterodera glycines*)
- ☐ Race 1 ☐ Race 2 ☒ Race 3 ☐ Race 4 ☒ Other (Specify) Race 14
- ☐ Lance Nematode (*Hoplolaimus Colombus*)
- ☒ Southern Root Knot Nematode (*Meloidogyne incognita*)
- ☐ Northern Root Knot Nematode (*Meloidogyne Hapla*)
- ☒ Peanut Root Knot Nematode (*Meloidogyne arenaria*)
- ☐ Reniform Nematode (*Rotylenchulus reniformis*)
- ☐ OTHER DISEASE NOT ON FORM (Specify): _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ☐ Iron Chlorosis on Calcareous Soil
- ☒ Other (Specify) High Chloride soils

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ☐ Mexican Bean Beetle (*Epilachna varivestis*)
- ☒ Potato Leaf Hopper (*Empoasca fabae*)
- ☐ Other (Specify) _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	S59-V6	Seed Coat Luster	DP 5644 RR
Leaf Shape	DP 5644 RR	Seed Size	DP 5644 RR
Leaf Color	DP 5644 RR	Seed Shape	DP 5644 RR
Leaf Size	DP 5644 RR	Seedling Pigmentation	DP 5644 RR

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/POD
				CM Width	CM Length	% Protein	% Oil		
DP 5915 RR Submitted		1.4	60			35.1	20.0	13.1	
DP 5644 RR Name of Similar Variety		1.6	66			35.7	18.8	13.2	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A₂ in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

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EXHIBIT D

~~DP Technology Holding~~ ~~LLC's~~
~~Delta and Pine Land Company~~

APPLICATION FOR: (BT: 2/10/2004)

DP 5915 RR

ADDITIONAL DESCRIPTION

DP 5915 RR is an F₄ Roundup tolerant selection composited in the F₅ generation from the cross A5979*[P9592x(415 x 2384 BC₁ RR)]. It has white flowers, tawny pubescence and tan pods at maturity. Seeds are dull yellow with black hila averaging about 3000 seed per pound. DP 5915 RR is resistant to race 3 and moderately resistant to race 14 soybean cyst nematode. It is resistant to frogeye leaf spot, field tolerant to phytophthora root rot and tolerant to high chloride soils. It is moderately resistant to stem canker and is susceptible to root knot nematodes.



Deltapine Seed

Soybean Product Nomination Form

DP 5915 RR

C. TINIOUS
Soybean Project Leader
December, 1999

DP 5915 RR

PRODUCT SUMMARY SHEET

KEY FEATURES

Very good yield potential
 Resistant to races 3 and 14 of SCN
 Resistant to frog-eye leaf spot
~~Moderately resistant to stem canker~~
 (Per applicant's authorization to match Exb. D. rec'd 2/10/2004 bt)

PRODUCT DESCRIPTION

Trait	Phenotype
Relative maturity	5.9
Roundup Ready™	Yes
STS®	No
Flower color	White
Pubescence color	Tawny
Hilum color	Black
Podwall color	Tan
Seed size	3000/lb
Seed protein	36.3%
Seed oil	18.6%
Peroxidase reaction	Untested
Seedcoat luster	Dull
Hypocotyl color	Bronze
Seed shape	Spherical flattened
Leaflet size	Medium
Leaflet color	Dark green
Canopy	Intermediate
Growth habit	Determinate
SCN race 3	Resistant
SCN race 14	Moderately resistant
Common root knot	Susceptible
Peanut root knot	Susceptible
Javanese root knot	Untested
Lance nematode	Untested
Frog-eye leafspot	Resistant
Sudden death	Untested
Stem canker	Moderately resistant Moderately resistant (bt: 2/10/2004 per applicant's authorization)
Phytophthora root rot	Untested resistant (bt: 2/10/2004 per applicant's authorization)
Red crown rot	Untested
Chloride tolerance	Tolerant
Aerial Blight	Untested

BREEDER'S SUBJECTIVE RATINGS

Field emergence	Very good
Early vigor	Very good
Narrow rows	Excellent
Wide rows	Very good
No-till	Excellent
Late planting	Very good
Poorly-drained soils	Very good
Shatter resistance	Excellent

PRODUCT IDENTITY

Line selected by: Dr. Grover Shannon
 Former designation: 94408-803
 Pedigree: A5979*[P9592*(DPL415*RRBC₁)]
 Areas of adaptation: Midsouth and Southeast
 Replace: DP 5960 RR
 Complement: DP 5989, DP 6200 RR
 Main competition: AG 5802, S59-V6
 Most similar line: DP 5960 RR

YIELD HISTORY

Outyielded DP 5960 RR by 7% in 15 Midsouth trials
 Outyielded DP 5960 RR by 16% in 4 Southeast trials
 Yield rank was 5/24 over 8 locations in 1999
 Yield rank was 7/24 over 14 locations in 1998

KNOWN WEAKNESSES

Moderately ~~susceptible~~ resistant (bt: 2/10/2004 per applicant's authorization) to stem canker
 Susceptible to root knot nematodes

SEED STOCK STATUS

2,400 units of breeder seed at GFS

ADDITIONAL DESCRIPTION

Offtypes of each of the following traits may be exhibited in up to 1% of the plants of this variety: flower color, pubescence color and hila color.

DP 5915 RR **PRODUCT PERFORMANCE**

Combined data, all locations 1998-1999

	YIELD		MAT	HGT	LDG
	bu/ac	%5960			
DP 5915 RR	53.4	109	-0.2	28.5	1.5
DP 5806 RR	50.6	101	-0.3	30.1	2.0
DP 5960 RR	50.1	100	0	31.4	1.9
S59-V6	52.0	104	-1.9	27.1	1.8
Locations	19		10	18	15

Data by region

Midsouth, all locations, 1998-1999

	YIELD		MAT	HGT	LDG
	bu/ac	%5960			
DP 5915 RR	53.7	107	1.3	26.7	1.5
DP 5806 RR	49.6	99	0.9	29.8	2.1
DP 5960 RR	50.0	100	0	29.8	1.9
S59-V6	51.3	103	-0.6	26.1	1.7
Locations	15		5	12	12

Southeast, all locations, 1998-1999

	YIELD		MAT	HGT	LDG
	bu/ac	%5960			
DP 5915 RR	58.1	116	-1.5	32.0	1.5
DP 5806 RR	54.4	109	-1.4	30.7	1.9
DP 5960 RR	50.1	100	0	34.5	1.6
S59-V6	54.5	109	-3.1	29.2	1.6
Locations	4		5	6	3

In 6/19 research trials, DP 5915 RR has exceeded the mean yield of the trial by 10% or greater.

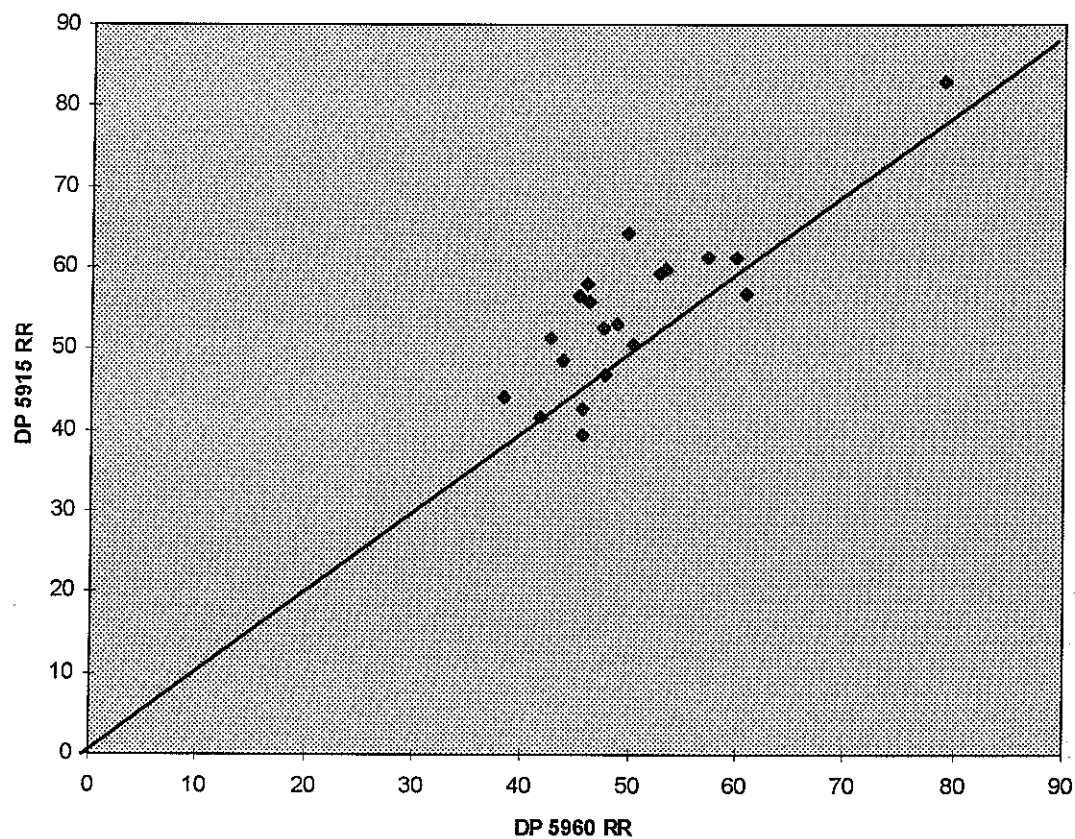
In 9/19 research trials, DP 5915 RR has been among the top 1/3 of entries for yield.

In 1/19 research trials, DP 5915 RR has been the highest-yielding entry in the trial.

DP 5915 RR

PRODUCT PERFORMANCE

DP 5915 RR vs DP 5960 RR



This scattergram depicts the head-to-head performance of DP 5915 RR against DP 5960 RR in 19 research trials conducted during 1998 and 1999. The axes are graduated in bushels/acre, and a point indicates the yields of the two varieties at a given environment. DP 5915 RR has out-yielded DP 5960 RR 15/19 times.

DP 5915 RR
DISEASE REACTION DOCUMENTATION

Soybean Cyst Nematode (*Heterodera glycines*)

Data from Dr. Lawrence Young, USDA, Jackson, Tennessee

Line	Race 3 1998	Race 3 1999	Race 14 1998	Race 14 1999
DP 5915 RR	1.0	2.6	3.9	2.7
Res. Check	1.0	1.4	2.2	1.0
Sus. Check	5.0	5.0	4.6	5.0

Scale: 1= 0 to 5 females/plant, 2= 6 to 10, 3= 11 to 20, 4 = 21-40, 5 = more than 40 females/plant

Root Knot Nematode (*Meloidogyne incognita* and *M. arenaria*)

Data from Dr. Robert Kinloch, Univ. of Florida, Jay, Florida

Line	<i>M.i.</i> 1997	<i>M.i.</i> 1998	<i>M.a.</i> 1997	<i>M.a.</i> 1998
DP 5915 RR	5.0	2.0	5.0	3.5
Res. Check	1.5	2.0	1.0	2.0
Sus. Check	5.0	3.5	3.0	3.5

Scale: 1= no galling, 5= very severe galling

Stem Canker (*Diaporthe phaseolorum* (Cooke & Ellis) Sacc. f. sp. *meridionalis* (Morgan-Jones)

Data from Dr. Grover Shannon, Deltapine Seed, Scott, Mississippi

Line	1998 Score	1999 Score
DP 5915 RR	3.0	1.0
Res. Check	1.0	1.0
Sus. Check	5.0	3.0

Scale: 1= no symptoms, 5= very severe symptoms

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) D&PL TECHNOLOGY HOLDING COMPANY, LLC.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER DPX 5915 RR	3. VARIETY NAME DP 5915 RR
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) P.O. BOX 157 SCOTT, MISSISSIPPI 38772	5. TELEPHONE (Include area code) 662.742.4141	6. FAX (Include area code) 662.742.3182
7. PVPO NUMBER 9900285 099000285		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

DP 5915 RR contains a proprietary gene, patented by the Monsanto Company and licensed to D&PL, which encodes a protein which provides tolerance to glyphosate herbicide in soybean cultivars.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

~~D&PL Technology Holding Company, LLC's~~
~~Delta and Pine Land Company's~~ Application for DP 5915 RR
(BT: 4/20/2004)

Exhibit E

Statement of the Basis of Ownership

DP 5915 RR originated from crosses made by employees of the Research Department of ~~D&PL Technology Holding Company, LLC (BT: 4/20/2004)~~ Delta and Pine Land Company (D&PL). Work product of these employees is the property of D&PL. D&PL has assigned all of its rights as owner of DP 5915 RR to its wholly owned subsidiary, D&PL Technology Holding ~~Corp. Company, LLC (BT: 4/20/2004)~~.

DP 5915 RR contains a proprietary gene, patented by the Monsanto Company and licensed to D&PL, which encodes a protein which provides tolerance to glyphosate herbicide in soybean cultivars.